

1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this project is to upgrade a portion of the US 90 corridor to a full “Control of Access” highway meeting interstate standards to become an extension of Interstate 49 (I-49). This project is needed to improve safety, facilitate hurricane evacuation, and meet projected national, state, regional, and local travel demands through the year 2030. The project is intended to coordinate with coastal restoration efforts and to support the ground transportation requirements of the region’s ports, airports, industrial and agricultural economy, and tourism. This project is proposed by the Louisiana Department of Transportation and Development (DOTD) in cooperation with the Federal Highway Administration (FHWA) and will be developed in coordination with federal and state resource agencies.

This Final Environmental Impact Statement (FEIS) concerns the development of Interstate Highway 49 (I-49) South in the US 90 corridor between the LA 1 / LA 308 interchange at Bayou Lafourche near Raceland in Lafourche Parish and the existing completed portion of the elevated Westbank Expressway near Ames Boulevard in Jefferson Parish, a distance of 36.3 miles. This project also includes an extension of Interstate Highway 310 (I-310) from its current alignment to an interchange with I-49, a distance of approximately 2.3 miles. The total length of mainline interstate construction would be 38.6 miles.

A Notice of Intent (NOI) was published in the *Federal Register* on March 3, 2006, advising the public of the initiation of the planning process leading to this EIS in accord with the National Environmental Policy Act (NEPA).

Earlier, in March 2003, NOI’s were published for two separate Sections of Independent Utility (SIU) for I-49 South. SIU 1 extended from the LA 1/LA 308 interchange at Bayou Lafourche in Lafourche Parish to the Davis Pond Diversion in St. Charles Parish, a distance of approximately 23 miles. SIU 2 overlapped SIU 1, extending from LA 306 in St. Charles Parish to the completed portion of the elevated Westbank Expressway near Ames Boulevard in Jefferson Parish, a distance of approximately 20 miles.

The NOI of March 2006 gave a project length of 43 miles, which is the sum of the distances in the NOI’s issued in March 2003. The elimination of the overlap between LA 306 and the Davis Pond Diversion Canal, accounts for the Preferred Alternative having a length shorter than the length given in the NOI of March 2006.

For planning purposes, the project is divided into Links, which are sections of the corridor that display common issues of concern related to environment, traffic, and roadway geometry. SIU 1 included Links 1 through 4, and SIU 2 included Links 3 through 6. **Exhibit 1-1** shows the study area and the Links of this project.

The NEPA planning process was initiated in 2003 to select an alignment for each SIU. Conceptual engineering design and technical investigations of the affected environment and of the environmental consequences of the alternatives were undertaken. Three rounds of Public Information Meetings, three in each Parish for each SIU, twelve in all, plus numerous other meetings with public officials and residents, were held throughout 2003, 2004, and early 2005. In August 2005, a DEIS

Exhibit 1-2 High Priority Corridor



I-49 would augment the Interstate system serving the Midwestern states, promoting both trade and tourism. In Louisiana, as shown in Exhibit 1-3, I-49 is complete and operates between Shreveport and Lafayette. The construction of an I-49 extension from Shreveport to Arkansas began in 2006. In the south, I-49 is planned to connect the interchange of I-49 and Interstate 10 (I-10) in Lafayette with I-10 in New Orleans by upgrading the existing US 90 corridor on the west bank of the Mississippi River, which is roughly parallel to I-10 on the east bank of the river. For planning purposes, DOTD designated the section from Lafayette to New Orleans as I-49 South.

I-49 South may relieve congestion on I-10 between Lafayette and New Orleans. This would result in the improvement of access throughout the southern region of the state.

The distance from I-10 in Lafayette to Ames Boulevard and the freeway portion of the Westbank Expressway (US 90 Business) in Jefferson Parish, within the New Orleans Metropolitan Area, is 140 miles. From Ames Boulevard to I-10 in New Orleans, US 90 Business, the proposed I-49 corridor, is complete and operates as the Westbank Expressway, a control of access freeway. Existing US 90/I-49 South is, and would continue to be, maintained and operated by the DOTD. The enlarged area of **Exhibit 1-3** presents the status of the planning undertaken for I-49.

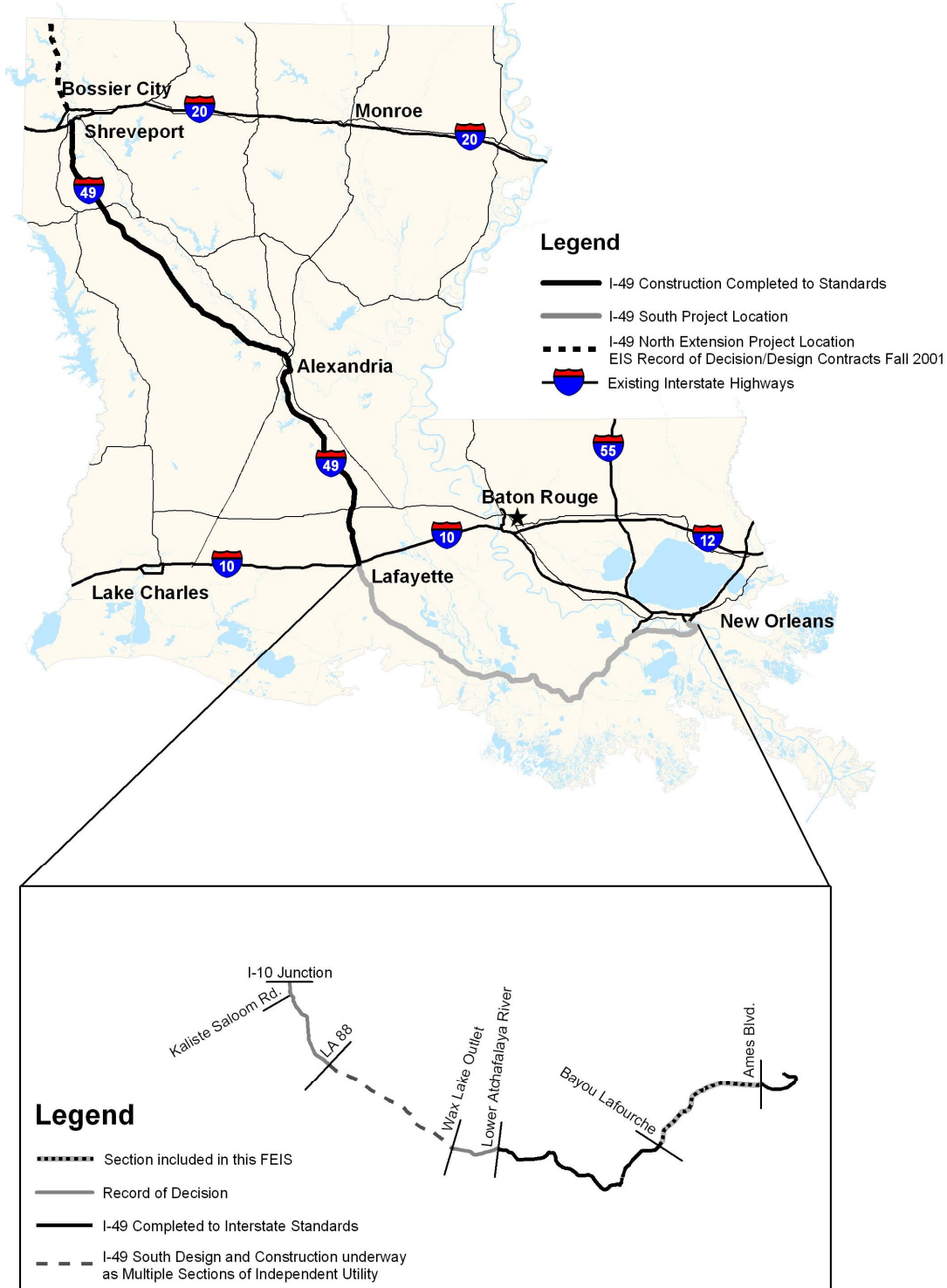
1.2 Project Purpose

As stated in the *Feasibility Analysis to Upgrade US 90 to I-49*, “The proposed I-49 South project is expected to significantly enhance the interstate highway network at the state as well as national levels.” The I-49 South Project Task Force stated in its report, “This highway is important to provide for desperately needed hurricane evacuation, critically needed traffic safety for over one-third of the state's population, and for the economic development of our region.”

The purposes of the establishment of I-49 South are to:

- Connect I-49 South to north Louisiana and the nation (system linkage);
- Facilitate hurricane evacuation;
- Increase capacity to meet the design year demand;
- Improve safety and efficiency through higher roadway design standards;

Exhibit 1-3 Overview of I-49 Planning in Louisiana



- Enhance the economic potential of Louisiana through improved access to ports, airports, industrial sectors, and tourist attractions; and
- Achieve these goals while maintaining consistency with flood control plans and with *Louisiana's Comprehensive Master Plan for a Sustainable Coast* and other programs that provide for the protection of the natural environment.

1.3 Need for the Project

Development of the US 90 corridor into "Future I-49" South has been documented in reports and emphasized by Governor Kathleen Blanco, former Governor M. J. "Mike" Foster, the DOTD, the I-49 South Project Task Force, the I-49 Congressional Caucus, and local government officials. The project needs are listed below.

1.3.1 System Linkage

The construction of I-49 South would provide a transcontinental highway compatible with national, state, and regional/local plans for system linkage by increasing capacity, and improving safety and efficiency during normal operations and coastal evacuation events. This cannot be achieved by upgrading US 90 as an arterial roadway. It would be necessary to create a freeway meeting interstate standards within the US 90 corridor.

1.3.1.1 National

In addition to designation of I-49 as HPC 37 and the formation of the bipartisan I-49 Congressional Caucus, the Transportation Equity Act for the 21st Century (TEA-21) designated the route of US 90 between Lafayette and New Orleans as "Future I-49." This designation was provided with the understanding that the route would be improved to interstate standards within 12 years of the date of the agreement.

The national system component of the designation is very important as it inherently establishes the design criteria for proposed I-49 South as a control of access interstate highway. It does not suggest that geometric and/or capacity enhancements can meet the national system linkage objectives.

1.3.1.2 State

I-49 has widespread support throughout Louisiana. Former Governor Foster and Louisiana administrators have pledged support and funding to construct "Future I-49" from Lafayette to New Orleans over a 10-year period. The lead state agency is the DOTD. Former Governor Foster established the I-49 South Project Task Force in September 1997 with the mandate to document reasons for designating US 90 between the Westbank Expressway in New Orleans and I-10 in Lafayette an interstate route. *The I-49 Regional Task Force Report* (DOTD 1998) succinctly defines the following justifications for I-49 South:

- "The area of Louisiana south of Lafayette to New Orleans has sustained the greatest economic growth in the state within the most recent 25 years."
- "An improved transportation system would stimulate tourism development and additional economic growth for the area."
- "The Louisiana Offshore Oil Platform (LOOP) and other oil-related and marine industries would be more accessible."

- “A more suitable hurricane evacuation route for the coastal regions of Louisiana would be provided.”
- [Statistics show that] “US 90 from Lafayette to New Orleans is one of the most dangerous highways to travel on in the State of Louisiana.”
- [I-49 would] “increase the accessibility to five major ports in the Louisiana port system, which is one of the largest port systems in the world.”

The “Future Corridor I-49” signs located along the proposed I-49 South route are evidence that the task force is accomplishing its goal of raising public awareness of the project. Future I-49 South also is included in the draft Statewide Transportation Plan as a “State Highway of Significance” (SHS) (DOTD 2003).

The I-49 project is presently included in Louisiana’s master plan for economic development, *Vision 2020*, and is considered vital to enhancing Louisiana’s position in the domestic and international marketplaces, supporting the offshore oil and gas industry in the Gulf of Mexico, and increasing hurricane evacuation capabilities in the south central and southeast regions of the state.

1.3.1.3 Regional/Local

Residents, businesses, schools, and public services rely on US 90 for access. Upgrading US 90 to interstate status necessitates accommodating local access needs and establishing connectivity between I-49 and the local network, including US 90.

Continued economic growth depends on a reliable, efficient, safe highway network of sufficient capacity to sustain development. For example, businesses that serve the oil industry form an important sector in the local economy. The success of this sector requires suitable highway access and generates frequent trips. The US 90 corridor is projected to continue to be an attractive location for this important sector of the economy because of its location convenient to areas of production.

1.3.2 Evacuation Planning

Over the past 100 years, the coastline of Louisiana has experienced the highest incidence of major hurricane strikes (Category 3 to 5) of any part of the Gulf Coast (LSU 2000). Many residents, offshore workers, and tourists located in coastal areas are susceptible to storm surge inundation and freshwater flooding. The *Southeast Louisiana Hurricane Preparedness Study* estimated that approximately 515,830 residents of Southeast Louisiana reside in areas vulnerable to storm surge inundation during a slow moving Category 2 hurricane event, while 1,154,700 residents live in areas vulnerable during a Category 5 hurricane event (USACE 1994).

A reliable roadway network is necessary to evacuate these vulnerable populations during storm events. Two roadway design components that contribute to reliable hurricane evacuation are the vertical elevation of the travel lanes above the predicted pre-storm flood elevation and the capacity of the roadway as determined by the number of travel lanes and other considerations. Only a freeway with its characteristic control of access can be modified efficiently to provide a contraflow system that doubles the capacity of the roadway. Also, freeways typically provide directional ramp interchanges that would reduce congestion for those entering the roadway.

1.3.3 Transportation System Improvements

The demand on Louisiana's interstate system, similar to national trends, has continued to increase, especially near metropolitan areas. According to the Bureau of Transportation Statistics, between 1993 and 1996, the driving-age population of Louisiana increased four percent, to approximately 3,326,000 drivers, and the annual vehicle miles traveled (VMT) increased 11% to 40,326,000 VMT. Between 1993 and 1996, the total road and street mileage grew by only 2% to 60,747 miles.

DOTD has developed a statewide transportation model. Simulation of the statewide network for the 2030 design year indicates that up to 9,000 trips per day will be undertaken between New Orleans and Lafayette. While the majority of these trips would utilize the I-10 corridor, I-49 would serve as an alternate parallel route.

Traffic analyses were conducted on US 90 in the study area considering existing conditions in 2002 and projected conditions in 2030, the design year. These analyses are summarized in **Table 1-1**, which shows the actual 2002 traffic, and **Table 1-2**, which shows the projected traffic on US 90 under No-Build conditions. No-Build describes design year traffic if the proposed project is not built, but assumes that all projects already approved and included in the transportation program have been completed. No-Build is not a projection of existing conditions to the design year. Traffic capacity analyses for both periods are presented in average daily traffic (ADT) counts, peak volumes, and peak level of service. The *Highway Capacity Manual* provides the following definitions:

- Capacity represents the maximum number of vehicles that can pass a given point during a specified period under prevailing roadway, traffic and control conditions for a given facility, and
- Level of Service (LOS) identifies the operating conditions of a given roadway. There are six levels of service, which are described by letter designations from A to F with LOS A representing the best operating conditions and LOS F the worst.

From 2002 to 2030 congestion in the corridor can be expected to worsen under No-Build. As the tables indicate, among the 20 cases based on 10 sections and 2 directions of travel, the Peak Hour LOS is projected to change as follows:

- To deteriorate in 15 cases; and
- To remain the same in 4 cases, including remaining at LOS F westbound between I-310 and Willowdale and between Victory and Ames.

1.3.4 Highway Safety

I-49 South would provide the safety benefits of a freeway, especially control of access that eliminates many safety concerns associated with other roadways. There are no left turns permitted or uncontrolled intersections, and there is greater distance between traffic traveling in opposite directions. Freeways provide the greatest levels of efficiency, safety, and reliability in the movement of people and goods.

1.3.5 Economic Development

I-49 South will sustain economic development in Louisiana. *Louisiana: Vision 2020, Master Plan for Economic Development* has two goals relative to I-49 South:

Table 1-1
2002 Average Daily Traffic (ADT) and
Level of Service (LOS) for US 90

Location on US 90	2002 ADT		2002 Peak (vehicles per hour / LOS)	
	Eastbound	Westbound	Eastbound	Westbound
LA 1 / LA 308 to LA 632	11,900	11,779	1,033 / A	1,192 / B
LA 632 to LA 306	12,313	12,548	880 / A	1,291 / B
LA 306 to I-310	17,722	18,282	1,207 / B	1,567 / C
I-310 to Willowdale	14,596	14,637	1,183 / B	1,376 / F
Willowdale to Live Oak	11,222	10,484	878 / A	1,044 / B
Live Oak to US 90 Business	18,141	18,972	1,343 / B	1,931 / C
US 90 Business to LA 18	13,352	17,472	740 / A	1,925 / C
Location on US 90 Business				
US 90 to Segnette	21,563	24,849	1,785 / C	1,754 / C
Segnette to Victory	29,342	33,356	2,550 / B	2,784 / C
Victory to Ames Boulevard	28,752	36,801	1,963 / B	2,628 / F

Table 1-2
2030 No-Build Average Daily Traffic (ADT) and
Level of Service for (LOS) US 90

Location on US 90	2030 ADT		2030 Peak (vehicles per hour / LOS)	
	Eastbound	Westbound	Eastbound	Westbound
LA 1 / LA 308 to LA 632	18,033	16,605	1,565 / B	1,707 / B
LA 632 to LA 306	19,056	17,393	1,469 / B	1,932 / C
LA 306 to I-310	20,797	22,823	1,801 / C	2,318 / D
I-310 to Willowdale	18,317	18,203	1,485 / C	1,711 / F
Willowdale to Live Oak	14,107	13,061	1,271 / B	1,558 / C
Live Oak to US 90 Business	21,642	21,806	1,883 / C	2,319 / D
US 90 Business to LA 18	20,746	22,477	1,482 / C	2,507 / D
Location on US 90 Business				
US 90 to Segnette	26,668	26,046	2,278 / D	1,984 / C
Segnette to Victory	35,116	36,471	2,950 / B	3,045 / D
Victory to Ames Boulevard	38,952	42,218	2,270 / C	3,092 / F

1. To provide information infrastructure, transportation infrastructure, tax structure, and a legal and regulatory climate conducive to the creation of an environment for profitable and competitive business; and
2. To preserve and develop Louisiana's natural and cultural assets for the enhancement of tourism.

Transportation infrastructure is vital because the following seven ports are accessed by the US 90 corridor and would be provided with improved access by completion of I-49 South: Houma Ship Channel, Port Fourchon, Port of Morgan City, Port of New Iberia, Port of New Orleans, Port of South Louisiana, and Port of West St. Mary.

The Louisiana port system is one of the largest port systems in the world and is among the largest economic generators for the state and the nation. In 2004, the Port of South Louisiana accounted for 119.4 million tons of domestic shipping and 104.8 million tons of foreign shipping for a total of 224.2 million tons. The foreign shipping was divided into 40.1 million tons of imported goods and 64.7 million tons of exported goods. This was the largest export tonnage of any US port in 2004. As **Table 1-3** shows, the Port of South Louisiana located along the I-49 South corridor ranked number 1. Also, it has consistently been at the top of total tonnage for the nation since 1990.

Table 1-3
Tonnage of Top 10 US Water Ports, Ranked by Tons (in millions)

Port Location	2004	
	Rank	Total Tons
South Louisiana, LA	1	224.2
Houston, TX	2	202.0
New York, NY and NJ	3	152.4
Beaumont, TX	4	91.7
Long Beach, CA	5	80.1
Corpus Christi, TX	6	78.9
New Orleans, LA	7	78.1
Huntington—Tristate	8	77.3
Texas City, TX	9	68.2
Baton Rouge, LA	10	57.1

Source: USACE, Tonnage for Selected US Ports in 2004

The economic contribution of Louisiana's ports comprises 22.5% of the state's gross state product (total dollar value of Louisiana's goods and services and 5.1% of the entire personal income in the state (Ryan 2001). One of every eight jobs in Louisiana is related to the port industry (Ryan 2001). Between 1997 and 1999, the port industry grew by 6% (Ryan 2001), an indication that the industry is continuing to grow.

The proposed Millennium Port concept would establish Louisiana as a "gateway between the international market and mid-America market" (Millennium Port Development Team V-I, 1999). An increase in port activities would correlate to an increase in traffic along US 90 and other coastal highways.

US 90 is also the gateway to the Outer Continental Shelf (OCS) along which oil and gas exploration activities occur. According to the Minerals Management Service (MMS), the OCS contains more than half of the nation's undiscovered oil and gas resources and currently provides 25% of domestic oil production and 26% of the natural gas output (LA 1 Coalition). Oil and gas operations in the Gulf of Mexico contribute \$6 billion annually to Louisiana's economy. Increases in OCS activities are also anticipated to increase traffic in the corridor (LA 1: America's Access to Energy). The I-49 South project is needed to provide the infrastructure necessary to sustain the oil and gas industry.

I-49 South also would facilitate tourist travel to and from south Louisiana. The rich and unique culture of the area offers diverse tourist attractions. I-49 South would improve access to south Louisiana attractions and sustain the growth of tourism.

1.4 Coordination with Other Programs

1.4.1 Transportation Plans

The Transportation Element of *Envision Jefferson 2020: A Comprehensive Plan (Envision Jefferson 2020)* (Jefferson Parish and the Regional Planning Commission 2002) defines I-49 as a critical transportation link for economic and general development. Upgrading the US 90 corridor to include an interstate highway would be compatible with this regional plan as well as other national and state transportation plans, and would be compatible with national, state, and regional/local plans for system linkage.

1.4.2 Economic Development Plans

Envision Jefferson 2020 also serves as the economic development plan for Jefferson Parish that includes I-49 as a featured element. St. Charles Parish implemented *SCOPE, St. Charles Overall Planning Effort, a Strategic Plan for Economic Development* in 2002. I-49 South would fit into one of the plan's primary infrastructure goals, "to develop a transportation plan that addresses short-term and long-term needs that facilitates growth and enhances quality of life, a plan that addresses moving people through and within St. Charles Parish."

1.4.3 Integrated Ecosystem Restoration and Hurricane Protection: Louisiana's Comprehensive Master Plan for a Sustainable Coast

Louisiana's Comprehensive Master Plan for a Sustainable Coast is a comprehensive coastal protection plan that embodies four objectives: reduce risk to economic assets, restore sustainability to the coastal ecosystem, maintain a diverse array of habitats for fish and wildlife, and sustain Louisiana's unique heritage and culture. The *Master Plan* was developed by the Coastal Protection and Restoration Authority through an act of the Louisiana Legislature following hurricanes Katrina and Rita in 2005. The FHWA and the DOTD recognize the importance of constructing I-49 South in a manner that is consistent with the goals, objectives, and mission of the *Master Plan*. The elements of the I-49 South that are consistent with the *Master Plan* include efforts to restore the natural hydrology and to help sustain the culture of the Barataria Basin by enhancing hurricane evacuation and transportation facilities.

Interference with existing or future planning under the *Master Plan* will be avoided to the extent practicable. Watershed restoration and protection is one of the main strategies of the *Master Plan*. Such efforts will include correcting and improving drainage and restoration of the natural hydrology.

The planning and design of I-49 will avoid or minimize impacts to wetlands to the extent practicable. Interference with any of existing or proposed projects under the *Master Plan* also will be avoided to the extent practicable.

There is a need to complement on-going restoration efforts in the project area, including the Davis Pond ecosystem restoration project, as well as other projects

identified in the *Master Plan*. I-49 South will be developed in coordination with the strategies of the *Master Plan* applicable to the project area, including the improvement of hydrology and drainage. The construction of proposed I-49 South would not interfere with the implementation of these strategies and may facilitate the implementation of some.

1.4.4 Hurricane/Flood Protection

The U.S. Army Corps of Engineers (USACE) New Orleans District (NOD) has two primary missions: navigation and flood control (NOD Mission Statement). Presently, the NOD is involved in the construction of four hurricane protection projects in the New Orleans Metropolitan Area and is studying the viability of another hurricane protection project in the I-49 South study area. This project is referred to as the “Donaldsonville to the Gulf of Mexico Hurricane Protection Project,” hereinafter referred to as the Donaldsonville to the Gulf Project.

One of the stated needs for the project is improved hurricane evacuation. To achieve this, the highway must be protected from hurricane or other storm-related flooding. Due to the necessity of both projects to provide hurricane protection for residents of south Louisiana, there is a need for the SIU 1 alternatives to be studied in coordination with the USACE NOD’s Donaldsonville to the Gulf Project.

1.4.5 NEPA/404 Concurrent Process

In 1996, the FHWA (Region 6), USACE (Southwestern Division), National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS, Southeast Region) now known as NOAA Fisheries, and U.S. Fish and Wildlife Service (USFWS) (Regions 2 and 4) signed an agreement to apply a concurrent NEPA/Section 404/10 process to transportation projects within their common jurisdiction. This agreement provides the framework to streamline project decision-making by pursuing one federal public interest decision for a federal-aid project. The guidance document *Applying the Section 404 Permit Process to Federal-aid Highway Projects* (1988) was developed by FHWA, USACE, NMFS, and USFWS, and U.S. Environmental Agency (USEPA) to define measures to integrate the two processes.

Coordination of the NEPA/404 Concurrent Process depends on the agencies continued involvement in several critical areas:

1. Coordination on the project Purpose and Need;
2. Participation in alternatives development; and
3. Participation in the selection of Build Alternatives.

This statement of Purpose and Need was forwarded to interested agencies for comments and coordination on February 20, 2004. Meetings with federal and state resource agencies were conducted to assess potential Build Alternatives for the proposed project. Designation of a Build Alternative as the Preferred Alternative in the combined DEIS was made at a coordination meeting with the agencies on September 28, 2006. Designation of the Selected Alternative in this FEIS was made following a coordination meeting with the agencies on July 25, 2007.

1.5 Summary

The project's purpose is to upgrade a portion of US 90 corridor to a full control of access highway meeting interstate standards as an extension of I-49. Meeting the project needs would provide the demonstrated benefits outlined below:

- **Connectivity of I-49 to north Louisiana and the nation (national system linkage)** – As a national transportation corridor, I-49 would provide a key north-south link throughout the central United States that is consistent with federal, state, and local planning efforts.
- **Regional System Linkages** – I-49 connects with the LA1/LA 308 corridor, which is a critical regional link connecting the offshore service industry, fisheries and agricultural sectors with the rest of Louisiana and the nation.
- **Improved hurricane evacuation** - I-49 South, a new roadway meeting interstate standards, would provide the capacity for reliable evacuation. I-49 was introduced into the *Southeast Louisiana Hurricane Preparedness Study* model and analyzed for its effect on the evacuation network. The exercise documented reductions of clearance times to nearly all primary evacuation routes.
- **Increased capacity to meet design year traffic demands** – There is a need to upgrade the capacity of the existing roadway network, especially US 90. The completion of I-49 South would increase the capacity of the US 90 corridor, and it would separate through-traffic from local and regional traffic.
- **Improved safety and efficiency through higher roadway design standards** - Control of access eliminates some of the safety concerns associated with other roadways. No left turns are permitted, there are no uncontrolled intersections, and there is a greater distance between traffic traveling in opposite directions. Of any class of highway, interstate freeways provide the greatest levels of efficiency, safety, and reliability.
- **Improved economic potential for Louisiana** - Through improved access to ports, airports, industrial sectors and tourist attractions, I-49 South would provide the transportation infrastructure necessary to sustain the continued viability of Louisiana's port related industries, oil and gas activities, and tourist attractions.
- **Consistency with other programs vital to the health and welfare of Louisiana** The development of I-49 South would proceed in conjunction with national, state and local transportation and economic plans. The project will be conducted in a manner that minimizes impacts to wetlands and avoids or minimizes interference with, or hampering the effectiveness of, any of the existing or proposed projects under *Louisiana's Comprehensive Master Plan for a Sustainable Coast*.